Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for formulating an enzyme comprising:

obtaining a library of glucose oxidase genes;

creating a library of mutated glucose oxidase genes;

introducing each mutated glucose oxidase gene of the library into separate expression vectors;

inserting the expression vectors into non-human host organisms;

growing colonies of the host organisms; and

screening the colonies for ~~desirable~~ predefined, desired properties by determining whether the colonies contain active glucose oxidase and determining whether the colonies have predefined, desired peroxide resistant properties,

wherein determining whether the colonies have predefined, desired peroxide resistant properties comprises:

incubating the colonies in peroxide; and

determining whether the colonies have active glucose oxidase after incubating the colonies in peroxide~~, and~~

wherein determining whether the colonies contain active glucose oxidase comprises:

~~measuring~~ detecting a concentration of ~~the~~ active glucose oxidase.

2. Cancelled.

3. (Currently Amended) A method for formulating an enzyme according to claim 1, wherein screening the colonies for desirable properties further comprises testing glucose oxidase from the colonies for functionality to function as a sensor enzyme in a sensor.

4. (Original) A method for formulating an enzyme according to claim 1, wherein determining whether the colonies have peroxide resistant properties is only performed if results of determining whether the colonies contain active glucose oxidase are positive.

5. (Original) A method for formulating an enzyme according to claim 3, wherein testing glucose oxidase from the colonies for functionality is only performed if results of determining whether the colonies contain active glucose oxidase are positive and if results of determining whether the colonies have peroxide resistant properties are positive.

6. (Previously presented)A method for formulating an enzyme according to claim 1, wherein determining whether the colonies have active glucose oxidase comprises employing a substance that changes color in the presence of active glucose oxidase.

7. (Original) A method for formulating an enzyme according to claim 6, wherein the substance is leuco-crystal-violet.

8. (Previously presented)A method for formulating an enzyme according to claim 1, wherein determining whether the colonies have active glucose oxidase comprises checking for fluorescence.

9. Cancelled.

10. (Previously presented)A method for formulating an enzyme according to claim ~~2~~ 3, wherein testing glucose oxidase from the colonies for functionality comprises employing glucose oxidase from the colonies in sensors.

11. (Original) A method for formulating an enzyme according to claim 10, wherein employing glucose oxidase from the colonies in sensors comprises:

extracting glucose oxidase from the colonies;

immobilizing the glucose oxidase after extracting the glucose oxidase from the colonies;

placing the immobilized glucose oxidase in a sensor; and

testing the sensor.

12. (Original) A method for formulating an enzyme according to claim 11, wherein extracting glucose oxidase from the colonies comprises employing an ionic column to extract glucose oxidase from the colonies.

13. (Original) A method for formulating an enzyme according to claim 11, wherein extracting glucose oxidase from the colonies comprises:

removing the glucose oxidase from the colonies;

purifying the glucose oxidase; and

characterizing the glucose oxidase.

14. (Original) A method for formulating an enzyme according to claim 13, wherein removing the glucose oxidase from the colonies comprises grinding the colonies in a homogenizer into cell components.

15. (Original) A method for formulating an enzyme according to claim 14, wherein removing the glucose oxidase from the colonies further comprises fractionating the cell components employing centrifugation and differential solubility after grinding the colonies in a homogenizer.

16. (Original) A method for formulating an enzyme according to claim 13, wherein removing the glucose oxidase from the colonies comprises disrupting the colonies into cell components via sonication.

17. (Original) A method for formulating an enzyme according to claim 16, wherein removing the glucose oxidase from the colonies further comprises fractionating the cell components employing centrifugation and differential solubility after disrupting the colonies via sonication.

18. (Original) A method for formulating an enzyme according to claim 13, wherein purifying the glucose oxidase comprises purifying the glucose oxidase by employing chromatography methods.

19. (Currently Amended) A method for formulating an enzyme according to claim 1, wherein the glucose oxidase is obtained from an organism and wherein the organism is selected from a group consisting of ~~Aspergillus Niger, Penicillium funiculosum, Saccharomyces cerevisiae, and Escherichia Coli~~ *Aspergillus Niger, Penicillium funiculosum, Saccharomyces cerevisiae, and Escherichia Coli*.

20. (Original) A method for formulating an enzyme according to claim 1, wherein creating at least one mutated glucose oxidase gene comprises employing polymerase chain reaction techniques to create at least one mutated glucose oxidase gene.

21. (Original) A method for formulating an enzyme according to claim 1, wherein creating at least one mutated glucose oxidase gene comprises employing error-prone polymerase chain reaction techniques to create at least one mutated glucose oxidase gene.

22. (Original) A method for formulating an enzyme according to claim 1, wherein creating at least one mutated glucose oxidase gene comprises employing gene shuffling techniques to create at least one mutated glucose oxidase gene.

23. (Original) A method for formulating an enzyme according to claim 1, wherein the method further comprises creating a next generation of mutated glucose oxidase genes after screening the colonies for desirable properties.

24. (Original) A method for formulating an enzyme according to claim 23, wherein creating a next generation of mutated glucose oxidase genes is repeated approximately 2 to 6 times.

25. (Withdrawn) An enzyme formulated according to the method of claim 1.

26. (Withdrawn) A method for formulating an enzyme comprising:
obtaining an organism with a glucose oxidase gene;
growing multiple colonies of the organism;
altering the environment of the colonies; and
screening the colonies to identify colonies with active glucose oxidase after altering the environment of the colonies.

27. (Withdrawn) A method for formulating an enzyme according to claim 26, wherein the organism is selected from a group consisting of Aspergillus Niger, Penecillium funiculosum, Saccharomyces cerevisiae, and Escherichia Coli.

28. (Withdrawn) A method for formulating an enzyme according to claim 26, wherein altering the environment of the colonies comprises introducing peroxide to the colonies.

29. (Withdrawn) A method for formulating an enzyme according to claim 26, wherein screening the colonies to identify colonies with active glucose oxidase comprises employing a substance that changes color in the presence of active glucose oxidase.

30. (Withdrawn) A method for formulating an enzyme according to claim 29, wherein the substance is leuco-crystal-violet.

31. (Withdrawn) A method for formulating an enzyme according to claim 30, wherein screening the colonies to identify colonies with active glucose oxidase comprises checking for fluorescence.

32. (Withdrawn) A method for formulating an enzyme according to claim 26, wherein the method further comprises testing the colonies with active glucose oxidase for functionality after screening the colonies to identify colonies with active glucose oxidase.

33. (Withdrawn) A method for formulating an enzyme according to claim 32, wherein the method further comprises continuing to alter the environments of the colonies until the colonies with active glucose oxidase are of a suitable number to proceed with testing the colonies with active glucose oxidase for functionality.

34. (Withdrawn) A method for formulating an enzyme according to claim 32, wherein testing the colonies with active glucose oxidase for functionality comprises employing glucose oxidase from the colonies in sensors.

35. (Withdrawn) A method for formulating an enzyme according to claim 32, wherein testing the colonies with active glucose oxidase for functionality comprises:

extracting glucose oxidase from the colonies;

immobilizing the glucose oxidase after extracting the glucose oxidase from the colonies;

placing the immobilized glucose oxidase in a sensor; and

testing the sensor.

36. (Withdrawn) A method for formulating an enzyme according to claim 35, wherein extracting glucose oxidase from the colonies comprises employing an ionic column to extract glucose oxidase from the colonies.

37. (Withdrawn) A method for formulating an enzyme according to claim 35, wherein extracting glucose oxidase from the colonies comprises:

removing the glucose oxidase from the colonies;

purifying the glucose oxidase; and

characterizing the glucose oxidase.

38. (Withdrawn) A method for formulating an enzyme according to claim 37, wherein removing the glucose oxidase from the colonies comprises grinding the colonies in a homogenizer into cell components.

39. (Withdrawn) A method for formulating an enzyme according to claim 38, wherein removing the glucose oxidase from the colonies further comprises fractionating the cell components employing centrifugation and differential solubility after grinding the colonies in a homogenizer.

40. (Withdrawn) A method for formulating an enzyme according to claim 37, wherein removing the glucose oxidase from the colonies comprises disrupting the colonies into cell components via sonication.

41. (Withdrawn) A method for formulating an enzyme according to claim 40, wherein removing the glucose oxidase from the colonies further comprises fractionating the cell components employing centrifugation and differential solubility after disrupting the colonies via sonication.

42. (Withdrawn) A method for formulating an enzyme according to claim 37, wherein purifying the glucose oxidase comprises purifying the glucose oxidase by employing chromatography methods.

43. (Withdrawn) An enzyme formulated according to the method of claim 26.

44. (Currently Amended) The method of formulating an enzyme according to claim 1, wherein the ~~host is a~~ host organism comprises a microorganism.

45. (Original) The method of formulating an enzyme according to claim 1, wherein determining whether the colonies contain active glucose oxidase further comprises isolating the glucose oxidase.

46. (Previously Presented) The method of formulating an enzyme according to claim 1, wherein screening the colonies for desirable properties further comprises:

isolating the glucose oxidase;

placing the glucose oxidase in a sensor; and

testing the sensor.

47. (Cancelled)

48. (Withdrawn) A method for making a biosensor comprising:

obtaining a library of glucose oxidase genes;

creating a library of mutated glucose oxidase genes;

introducing each mutated glucose oxidase gene of the library into separate expression vectors;

inserting the expression vectors into a host;

growing colonies of the host;

screening the colonies for desirable properties by determining whether the colonies contain active glucose oxidase and determining whether the colonies have peroxide resistant properties; and

placing a glucose oxidase gene having desirable properties into a sensor,

wherein determining whether the colonies have peroxide resistant properties comprises:

incubating the colonies in peroxide; and

determining whether the colonies have active glucose oxidase after incubating the colonies in peroxide, and

wherein determining whether the colonies contain active glucose oxidase comprises:

measuring a concentration of the glucose oxidase.

49. (Withdrawn) A method for making a biosensor according to claim 47, wherein screening the colonies for desirable properties further comprises testing glucose oxidase from the colonies for functionality.

50. (Withdrawn) A method for making a biosensor according to claim 47, wherein determining whether the colonies have active glucose oxidase comprises employing a substance that changes color in the presence of active glucose oxidase.

51. (Withdrawn) A method for making a biosensor according to claim 47, wherein determining whether the colonies have active glucose oxidase comprises employing a substance that changes color in the presence of active glucose oxidase.

52. (Withdrawn) A method for making a biosensor according to claim 51, wherein the substance is leuco-crystal-violet.

53. (Withdrawn) A method for making a biosensor according to claim 47, wherein determining whether the colonies have active glucose oxidase comprises checking for fluorescence.

54. (Withdrawn) A method for making a biosensor according to claim 47, wherein the host is a host organism.